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Modified cellulose ester for protection agent in cleaning agent -  
comprises solubility in aqueous solution having specified pH, especially  
for use in controlled-release pharmaceuticals and for pesticides

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Number of Countries: 023 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9738016	A1	19971016	WO 97US5645	A	19970404	199748 B
EP 892814	A1	19990127	EP 97920145	A	19970404	199909
			WO 97US5645	A	19970404	
US 5925181	A	19990720	US 9615013	A	19960408	199935
			US 97819932	A	19970318	
CN 1221429	A	19990630	CN 97195208	A	19970404	199944
MX 9808277	A1	19990201	MX 988277	A	19981007	200055
KR 2000005264	A	20000125	WO 97US5645	A	19970404	200061
			KR 98707967	A	19981007	

Priority Applications (No Type Date): US 97819932 A 19970318; US 9615013 A  
19960408

Cited Patents: 1.Jnl.Ref; US 3489743; US 3505312; US 5000869

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 9738016	A1 E	37	C08B-003/16	
Designated States (National): CA CN JP KR MX				
Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE				
EP 892814	A1 E		C08B-003/16	Based on patent WO 9738016
Designated States (Regional): DE FR GB IT				
US 5925181	A		C09D-101/14	Provisional application US 9615013
CN 1221429	A		C08B-003/16	
MX 9808277	A1		C08B-003/16	
KR 2000005264	A		C08B-003/16	Based on patent WO 9738016

Abstract (Basic): WO 9738016 A

A modified cellulose ester of formula (I) is new:

$[(C_6H_7O_2)(OR)x(OR')y(OH)_{3-x-y}]_n$  (I)

R = a hydrophobic group;

R' = a hydrophilic group excepting phthalyl or tri-mellityl; and

x, y, n = are selected so that the modified cellulose ester  
dissolves in aqueous solutions of pH no lower than 6.5 or above.

USE - Used for aqueous alkaline solutions (claimed) and  
compositions (claimed). Modified cellulose esters are useful as  
biodegradable coatings for the protection of active agents against  
their environment or vice versa. They are frequently used as enteric  
coatings but suffer from premature degradation in the acid pH of the  
stomach fluids. (I) may be used to coat or encapsulate medicaments,  
pesticides, insecticides and cleaning agents.

ADVANTAGE - (I) are especially designed to dissolve only at  
predetermined neutral/alkaline pH, preventing premature release of the  
active agent and avoiding any damage or loss of activity. The exact  
dissolution properties can be tailored by varying the nature of R and  
R' and the relative proportions of them.

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Derwent Class: A11; A97; D25